



A Guided Tour of the Zero Emission Vehicle Program

**California Air Resources Board
Northeast States for Coordinated Air Use Management**

November 19, 2003

Overview

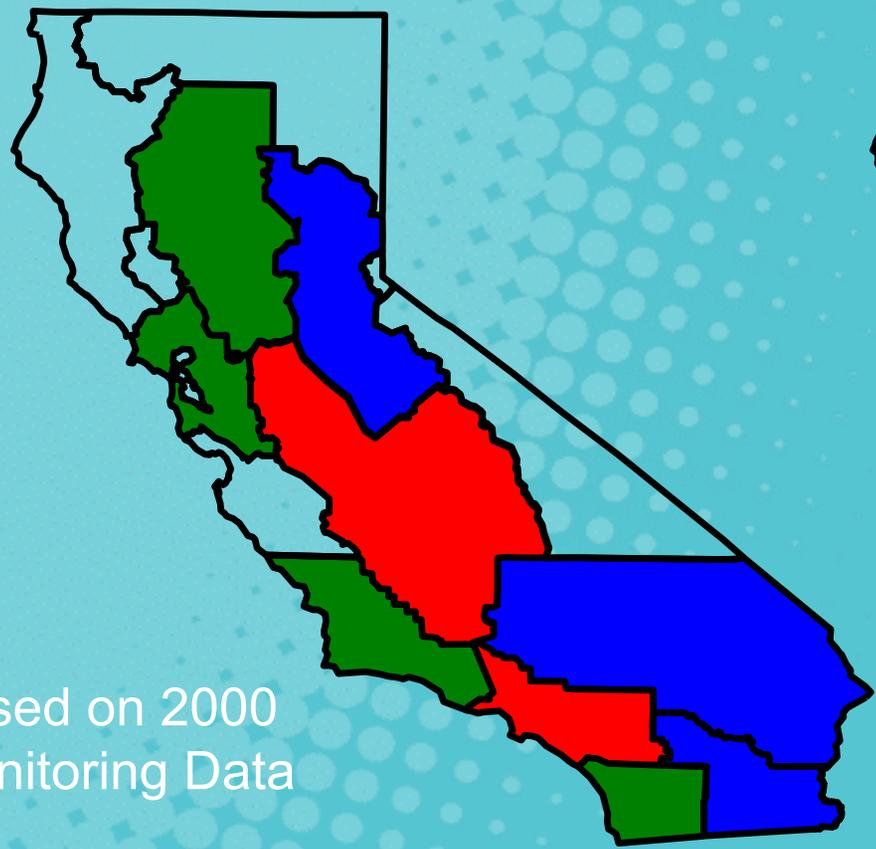
- **The challenge**
- ZEV program history & technology story
- The 2003 regulation
- ARB's role in bringing ZEVs to commercialization
- Section 177 States
- Next steps
- Conclusion

The Challenge...

Over 90% of Californians Breathe Unhealthy Air at Times

Days Over State Ozone Standard

Days Over State PM10 Standard

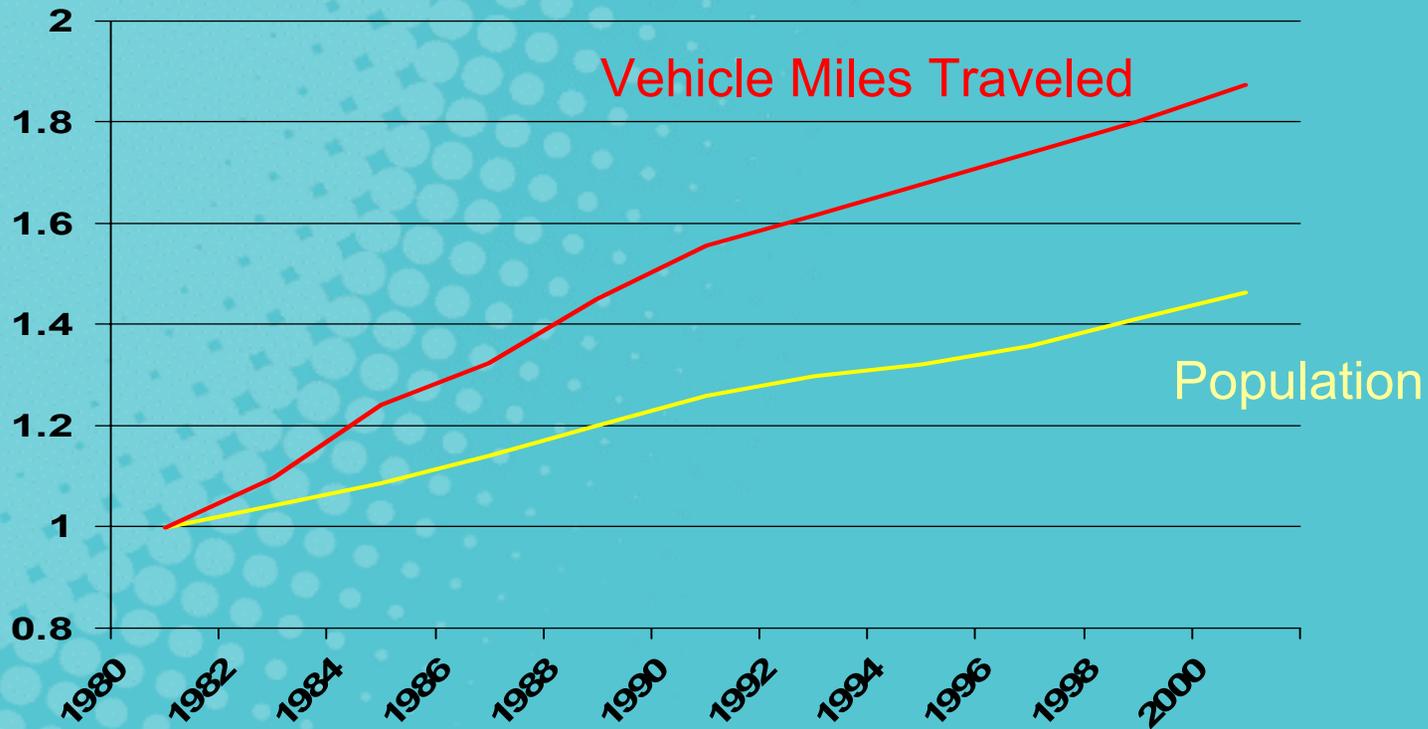


Based on 2000 Monitoring Data



The Challenge...

- Over 23 million registered vehicles
- Over 797 million miles driven every day
- Over 37 million gallons of gasoline consumed each day



Health Effects of Air Pollution

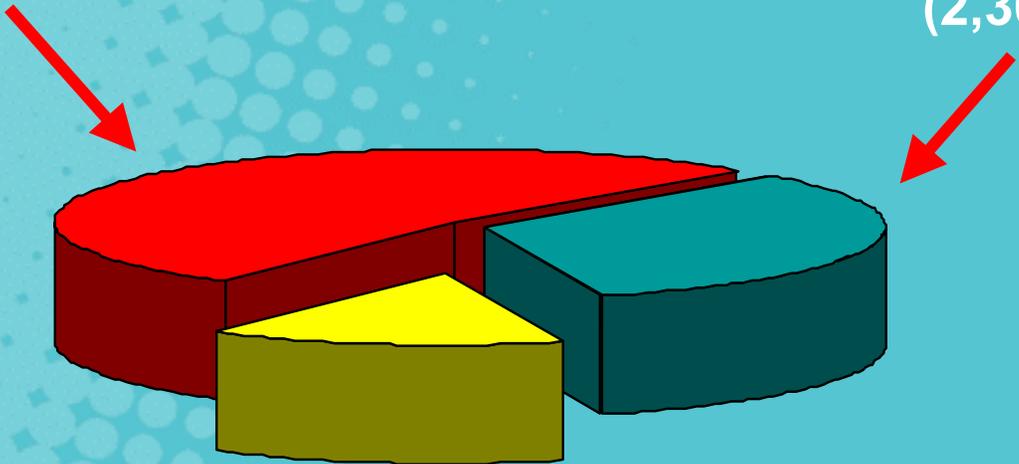
- **PM - Respiratory diseases**
- **SO₂ - Heart diseases, respiratory problems**
- **NO₂ - Lung irritation, viral infections, airway resistance, chest tightness**
- **Ozone - Impaired lung function, chest pains, coughing, eye irritation**
- **Toxics - Increased cancer risk, acute and chronic non-cancer health effects**



Motor Vehicles Cause over 60% of California's Air Pollution

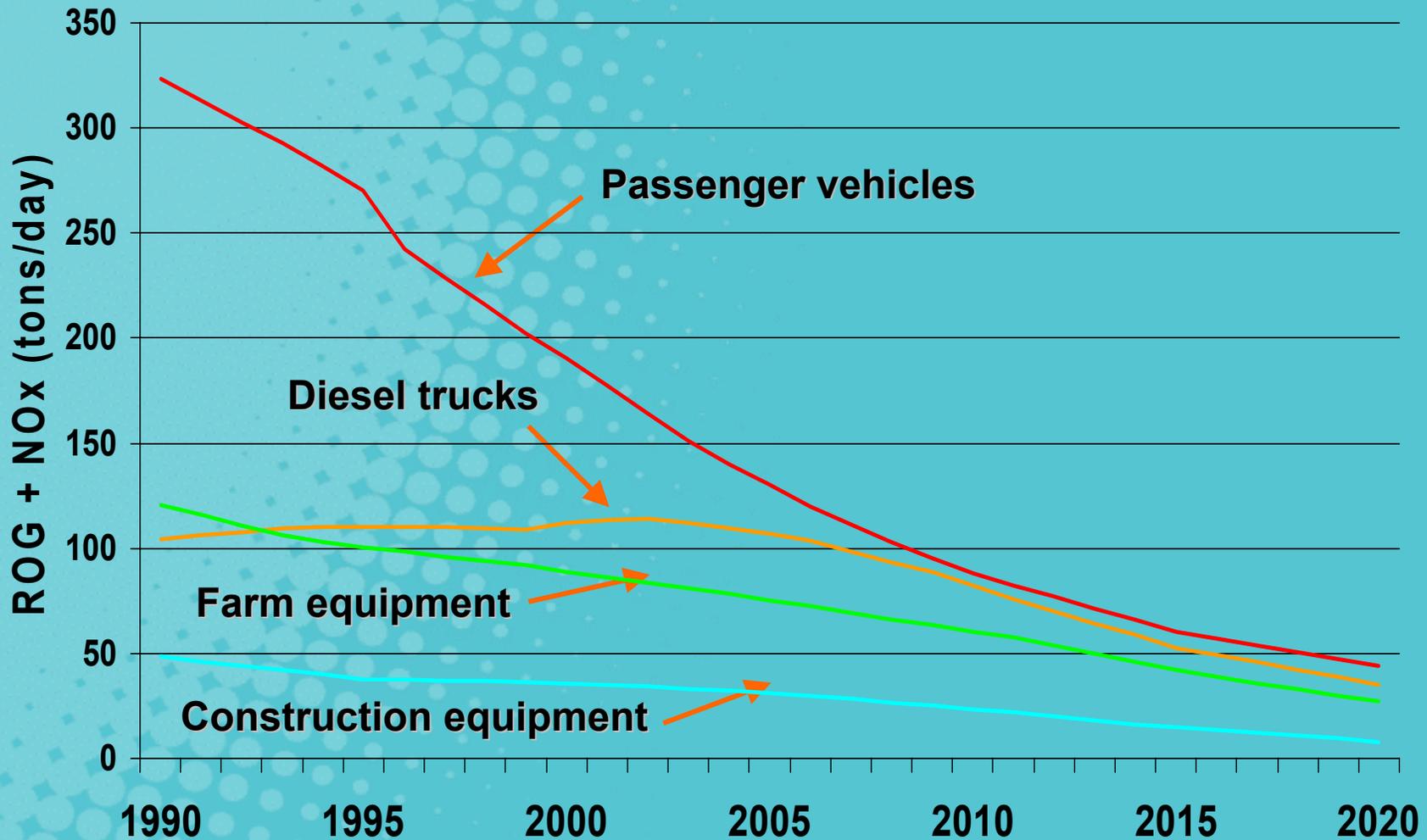
**On-Road Motor
Vehicles 53%**
(3,700 tpd)

**Stationary
Sources 33%**
(2,300 tpd)



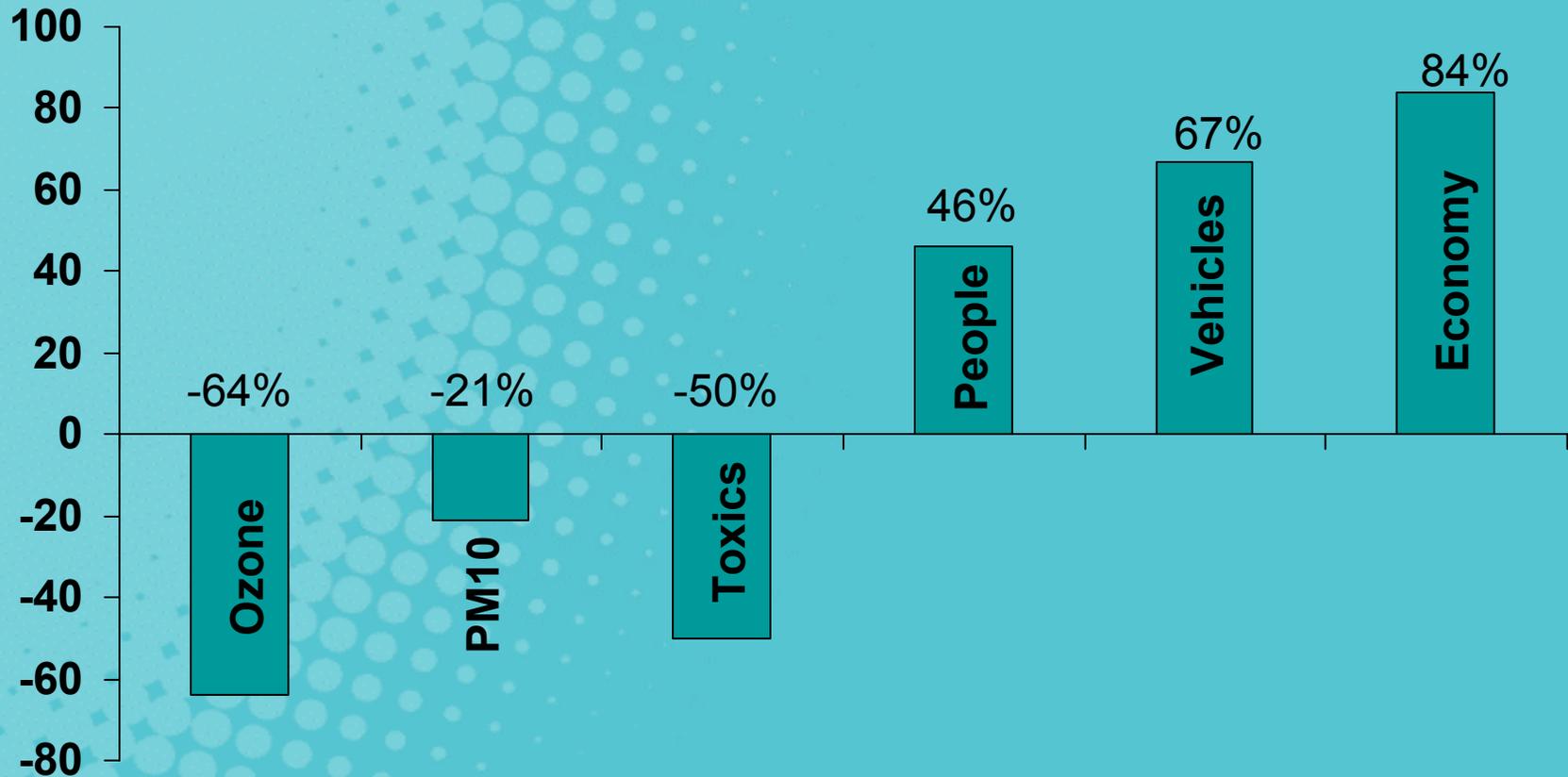
**Off-Road
Sources 14%**
(1,000 tpd)

Smog-Forming Emissions Are Going Down

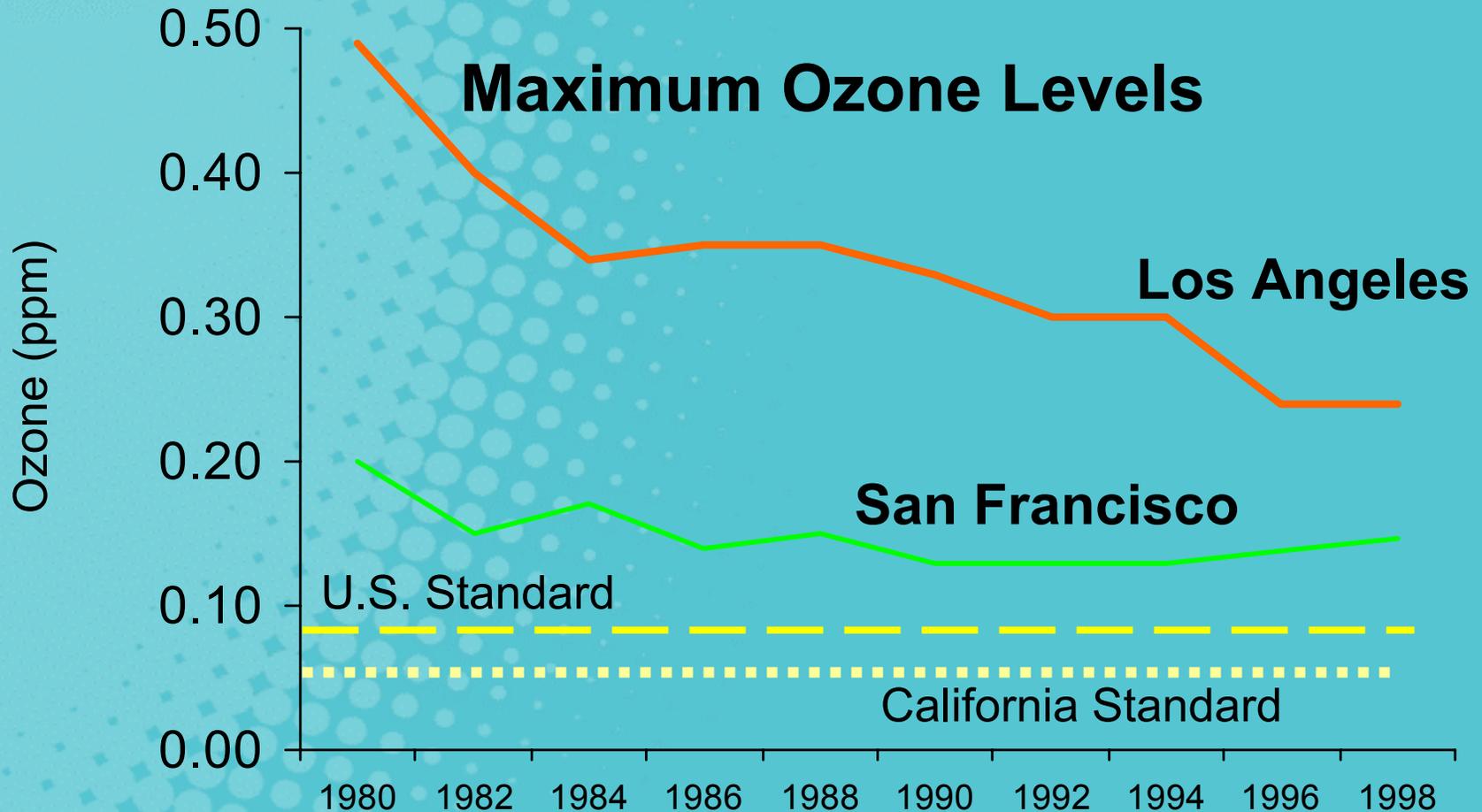


California Air Quality vs. Growth

**Percent Change 1980 to 1999
Greater Los Angeles Area**



But Further Improvement Is Needed



Goal is Near-Zero Emissions

